Appln. No. 09/961,362
Amendment dated: October 28, 2004
Reply to Office Action of July 29, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended):   A method of communicating between a host optical system controller and an optical subcontroller, the method comprising:

sending an initial command message from said host to said subcontroller, said command message including a first command identifier indicating a command from said host to said subcontroller;

receiving said first command message at said subcontroller;

consulting a command database at said subcontroller to interpret said first command message, said database containing mulitple possible valid command identifiers, each command identifier having a corresponding interpretation and action in said database based on a specific type of optical device connected to said subcontroller;

at said subcontroller, implementing an action corresponding to said first command message based on said corresponding interpretation of said command identifier and formulating a proper response to said command identifier based on a result of said corresponding action; and

sending a response message from said subcontroller to said host, said response message indicating a success or failure of said corresponding action,
wherein said subcontroller ignores subsequent command messages received prior to sending a response message responsive to the first command message [[.]] _and wherein said subcontroller controls at least one optical device for use in optical_

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<u>networking.</u>

Claim 2 (Original):   A method as in claim 1 wherein each response message includes at least one optical parameter to be set by said optical subcontroller.

Claim 3 (Original):   A method as in claim 1 wherein said first command message includes at least one optical parameter to be set by said optical subcontroller.

Claim 4 (Original):   A method as in claim 3 wherein said first command message further includes at least one magnitude to which said at least one optical parameter is to be set.

Claim 5 (Original):   A method as in claim 1 wherein said first command message further includes addressing data indicating a portion of an optical subsystem controlled by said optical subcontroller to which the command is to be applied.

Claim 6 (Currently Amended):   A database for use in communications between a host optical system controller and an optical subcontroller, said database containing multiple possible valid command identifiers which may be sent from the host to the subcontroller, each valid command identifier causing said subcontroller to perform an action once received by said subcontroller [[.]] ,
<u>wherein said subcontroller controls at least one optical device for use in optical networking.</u>

Claim 7 (Original):   A database as in claim 6 wherein entries in said database are used by said subcontroller to interpret said command identifier received from said host.

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Claim 8 (Original):   A database as in claim 6 wherein said database further contains
multiple valid responses to be sent from said subcontroller to said host in response to
said command identifiers.

Claim 9 (Original):   A database as in claim 6 wherein each command identifier defines
a format of data following said identifier in a message or response sent between said
host and said subcontroller.

Claim 10 (Currently Amended):   A command message sent from a host optical system
controller to an optical subcontroller, said command message including a command
identifier which defines a format of data included in said message [[.]] ,
wherein said optical subcontroller controls at least one optical device for use in optical
networking.

Claim 11 (Original): A command message as in claim 10 wherein said command
identifier is referenced in a database located at said optical subcontroller, said database
including multiple possible valid command identifiers, an interpretation of said
command identifier being dependent on said command identifier's entry in said
database.

Claim 12 (Currently Amended):   A response message sent from an optical
subcontroller to a host optical system controller in response to a command message
from said host, said response message including a command identifier identical to a
command identifier contained in said command message, said command identifier
defining a format of data included in said response message [[.]] ,said optical
subcontroller controlling at least one optical device for use in optical networking.

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Claim 13 (Original): A response message as in claim 12 wherein said command identifier is referenced in a database located at said optical subcontroller, said database including all possible valid command identifiers.

Claim 14 (Currently Amended):   A method of controlling an optical subsystem, the method comprising:

    a) sending a command message from a host controller to a subcontroller;

    b) receiving said command message at said subcontroller;

    c) decoding said command message at said subcontroller; and

    d) interpreting contents of said command message based on what type of optical device is addressed by said command message [[.]] ,

wherein said optical device is for use in optical networking.

Claim 15 (Original): A method as in claim 14 wherein step c) is accomplished by extracting a command identifier and addressing data from said command message.

Claim 16 (Original): A method as in claim 15 wherein step d) is accomplished by retrieving a database entry corresponding to said command identifier and based on said addressing data.

Claim 17 (Currently Amended):   A set of command identifiers for use with a control system for reconfigurable optical devices, each commands identifier in the set being sent from a host controller to a subcontroller controlling at least one reconfigurable optical device for use in optical networking, each command identifier being processed by the subcontroller when received and causing the subcontroller to perform an action affecting the at least one reconfigurable optical device.

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Claim 18 (Currently Amended):   A set of ~~commands~~ command identifiers as in claim 17 wherein at least one command identifier ~~ins aid~~ in said set sets at least one operating parameter ~~fro~~ for said at least one reconfigurable optical device.

Claim 19 (Currently Amended):   A set of command identifiers as in claim 17 wherein at least one command identifier in said set sets an alarm ~~thershold~~ threshold for said at least one reconfigurable optical device, said alarm threshold determining when said at least one reconfigurable optical device exceeds acceptable operating limits.

Claim 20 (Original): A set of command identifiers as in claim 17 wherein at least one command identifier in said set retrieves operating data from said at least one reconfigurable optical device.

Claim 21 (Original): A set of command identifiers as in claim 17 wherein at least one command identifier in said set retrieves an operating status of said at least on reconfigurable optical device.